

Goose Creek Design Reach Segment Analysis

Lower

| Design Reach | | Reference Reach | | % Difference Gradient |
|--------------|------------|-----------------|------------|-----------------------|
| STA | ELEV | STA | ELEV | |
| | -93 961.96 | | 59 970.72 | -0.03255 |
| | 20 968.66 | | 160 976.91 | |
| Slope = | 0.059292 | Slope = | 0.061287 | |

Upper

| Design Reach | | Reference Reach | | % Difference Gradient |
|--------------|------------|-----------------|------------|-----------------------|
| STA | ELEV | STA | ELEV | |
| | 385 991.64 | | 59 970.72 | -2.58% < 20% Diff |
| | 520 999.7 | | 160 976.91 | |
| Slope = | 5.97% | Slope = | 6.13% | |

Reference Reach

| step | | Pools | | | Segment | Riffle Length |
|------|--------|-------|--------|--|---------|---------------|
| Sta | height | depth | length | | length | |
| 0+58 | | 0.17 | 7 | | | |
| | | | | | 21 | 14 |
| 0+79 | 0.55 | 0.24 | 10.8 | | | |
| | | | | | 23 | 12.2 |
| 1+02 | 0.52 | 0.2 | 7.2 | | | |
| | | | | | 42 | 34.8 |
| 1+44 | 1.03 | 0.82 | 7.7 | | | |
| | | | | | 6 | -1.7 |
| 1+50 | 0.72 | 0.05 | 2.58 | | | |
| | | | | | 10 | 7.42 |
| 1+60 | | 0.27 | 6.4 | | | |

| | | | | | | |
|--------|-------|----------|----------|--|------|--------|
| Ave | 0.705 | 0.291667 | 6.946667 | | 20.4 | 13.344 |
| max | 1.03 | 0.82 | 10.8 | | 42 | 34.8 |
| min | 0.52 | 0.05 | 2.58 | | 6 | -1.7 |
| median | 0.635 | 0.22 | 7.1 | | 21 | 12.2 |

| | |
|---|------|
| DEEPEST POOL: | 0.83 |
| FORM: STEP-POOL, S>5%, BOULDER - COBBLE BOUNDARIES (FACTOR = 1) | |
| VAP: 0.83 X 1 | 0.83 |

Banfull width: 7.56

Stream Features Layout

Design Step Height 0.5
 Design Pool Length 7
 Design Segment Lengt 21

| Lower | Reach Length | | 105 | | | | |
|--------------|--------------|----------|------|----------|---------------|--------------|----------|
| Start Sta | PTC | Elev | Step | Elev | Riffle Length | Riffle Slope | |
| 6+58 | 6+58 | 965.72 | 6+51 | 966.22 | | | Existing |
| | | | | | 14 | 0.0544 | |
| | 6+37 | 966.9816 | 6+30 | 967.4816 | | | |
| | | | | | 14 | 0.0544 | |
| | 6+16 | 968.2432 | 6+09 | 968.7432 | | | |
| | | | | | 17 | 0.0469 | |
| | 5+92 | 969.56 | 5+85 | 970 | | | Existing |

| Upper | Reach Length | | 112 | | | | |
|--------------|--------------|----------|------|----------|---------------|--------------|----------|
| Start Sta | PTC | Elev | Step | Elev | Riffle Length | Riffle Slope | |
| 2+21 | 2+21 | 992.9 | 2+14 | 993.4 | | | Existing |
| | | | | | 14 | 0.0607 | |
| | 2+00 | 994.2498 | 1+93 | 994.7498 | | | |
| | | | | | 14 | 0.0551 | |
| | 1+79 | 995.5212 | 1+72 | 996.0212 | | | |
| | | | | | 14 | 0.0539 | |
| | 1+58 | 996.7758 | 1+51 | 997.2758 | | | |
| | | | | | 14 | 0.054 | |
| | 1+37 | 998.0318 | 1+30 | 998.5318 | | | |
| | | | | | 20.5 | 0.06 | |
| | 1+10 | 999.7618 | | | | | Existing |